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## ART. VI.—RAILROAD INFLATION.

USAGE and long-established authority have fixed upon the word "tax" a meaning which is too exclusively political,—as though some form of government could alone, and solely for its own purposes, impose a pecuniary burden under this name upon the wealth of a community. Such a definition is open to serious objections. It not only creates a mischievous confusion of ideas, but it actually deceives the community as to the extent and unnecessary nature of many of the burdens under which it labors. The burden of taxation, as it is called, is crudely measured by the proportion which the public revenue bears to the numbers or supposed wealth of any community as expressed in the census. Such a measure is fallacious in the extreme. A tax is not only a contribution taken directly from the resources of any community for governmental or public uses, but, in its general significance, it is also any burden, natural or artificial, which, without altering the intrinsic value, the quality, or the quantity of raw material, adds to its cost before it reaches the consumer.

It is an elementary principle of political economy, that all wealth comes from the soil; neither human industry nor human ingenuity can produce any addition to the material possessions of mankind, except from the earth. The legerdmain of paper financiering operates largely upon the distribution of property,—not uncommonly taking from one who is industrious, and giving to another who is cunning, a proportion of the honest results of labor. But however and with whatsoever degree of fraud it operates upon the distribution of wealth, it never directly creates it. Everything produced from the earth, moreover, is valuable only in so far as some one wants it and is willing to exchange labor or its products for it. Speaking somewhat loosely, all mankind may, then, be divided into the two great classes of consumers and producers,—to the first of which every human being, and to the last of which the vast majority of mankind, belongs. Between the producer of the raw material and the consumer there comes an intermediate class, the possessors of skilled labor, those who

by their labor lend an additional intrinsic value to the raw material. Such are all manufacturers. The sum total, therefore, of the wealth of any community and of the whole world consists of all that which it has extorted from the earth, enriched by any factitious value which may have been added to it. These two elements of cost—production and manufacture—are necessary preliminaries to a fitness for consumption: everything beyond these which adds to the price of a commodity before it reaches the consumer is a tax levied upon consumption or production; just as much a tax, if the increase is charged for transportation and collected by an importer over his counter, as if it is charged for revenue and received by a collector at the custom-house. If tea, for instance, is raised and cured in China, and thence transported thousands of miles to London, and the consumer in London pays three times the price at which it was sold by him who cured it in China, that additional sum, however fairly earned by the services rendered, is nothing more nor less than a tax of two hundred per cent on the consumption of tea in London, which again reacts and affects the profit on its production in China. It is a necessary tax, perhaps, in view of existing means of transportation, but none the less is it a tax. The process of removal from one point to another—from the point of production to that of consumption—has in this case added nothing to the wealth or possessions of the world. It has, indeed, distributed, but it has in no way increased or intrinsically qualified human possessions; for after it, as before, whether in Canton or in London, the world possessed the same number of pounds of tea of a given quality. So of flour, of cotton, and of every other product of the soil. Transportation cannot add to wealth; it is simply a distribution of wealth already in existence; and the cost of distribution constitutes a tax on consumption, levied indifferently on the producer, the manufacturer, and the consumer. This tax must necessarily fall upon all parties, though in unequal proportions very difficult to ascertain. The consumer has apparently to pay the entire amount. There is no doubt about his bearing a portion at least of the burden. But it does not rest on him alone, as few will deny in America, at least while unthreshed wheat is yet burned for fuel, and the trans-

portation tax at times robs the producer of the whole fruits of his toil. Could that tax be wholly abolished, and breadstuffs be transported without cost to London, the exchangeable value of flour would rise in Chicago and fall in Liverpool. Society would then at once be relieved of a tax in comparison with which all the imposts of governments are trivial. In like manner, anything which adds to the necessary cost of transportation aggravates the tax, and anything which diminishes it removes one more burden from human toil.

This is a form of taxation not often referred to in the treatises. Vastly the greater portion of all human expenditure is consumed in taxes, — if in taxes are included those profits and charges which add nothing to the sum of human wealth, but only to exchangeable values. Government taxes are burdensome enough, and most burdensome when they are hidden away under the ingenious fraud of indirect taxation: yet ninety-nine out of a hundred will uncomplainingly accept a rise in money value of one hundred per cent occasioned by an impost for revenue upon some article of necessary domestic consumption, and this, too, the immediate and legitimate result of some clumsy piece of fiscal legislation, when a direct tax amounting to no more than one fifth of what is thus annually filched from their pockets would strike them as intolerable oppression. Sir Robert Peel, in 1841, said in the House of Commons: “Give me a direct payment (in the form of an income tax) of five millions per annum, and I shall be able to reduce your taxation on tea, coffee, sugar, and all the other necessities of life, to the amount of twenty millions per annum.” This promise, fulfilled in the event, rested upon what should be an axiom in the science of revenue, — that taxes are more easily imposed and more patiently borne in the same proportion as they are indirect: though it will some day be generally recognized that in proportion as taxation is indirect it is onerous and oppressive. The mass of men are always superficial. They are apt to believe what they are pleased to call the evidence of their own senses, than which no evidence can be more deceptive. A tax levied by an assessor, and collected by a tax-gatherer, strikes the common run of mankind aghast. The cold, hard figures will not away. They are visible, they

are real, they must be paid, and that altogether and in ready money. One realizes, in paying the direct tax, the importance of economy in government, and feels corruption there to be a personal wrong; yet that same man will content himself with vague grumbling at "the hardness of the times," will see corruption run riot in every office of the government without a thought, provided he pays his fivefold tax only in the increased charges of the grocer, the tailor, and the haberdasher, and not down in hard money into the hands of an officer.

The course of the American people in regard to their paper currency furnishes a perfect illustration of this truth. They have the reputation of being quick to discern their own interest, especially when the dollar enters into the account, and it was once conceded in this country that no tax was so inequitable or so onerous as the tax imposed by the use of irredeemable paper money,—so profitable to the speculator and the gambler, so oppressive to the honest and industrious. The vast majority of our people were supposed to belong to the latter class. Paper money imposes a tax on this latter class in favor of the former. What is the amount of the tax? The annual sales of merchandise alone in this country are returned at ten thousand millions of dollars. Upon this immense mass of transactions a tax must be levied to cover fluctuations of paper value. Those who make transfers can only in this way secure themselves against loss, present and future. This tax is paid by every consumer, on every article consumed, on which those by whom exchanges are made do not suffer a loss; and in view of the fluctuations which take place in values, one and a half per cent cannot be considered an unreasonable provision against them. The currency tax, then, amounts to \$150,000,000 a year, or one half of the expenditure of the United States. This is a tax which does not appear in the Reports of the Treasury,—a mere incidental payment made by consumers to dealers and middle-men,—those by whom exchanges are made,—the class to which almost exclusively the speculators and gamblers belong. All mankind in America pay this tax, but all do not profit by it. The middle-man pays it in so far as he is a consumer, and he profits by it in so far

as he is a middle-man,— he receives many-fold what he pays ; the mere consumer pays as such, and receives nothing ; the producer pays in so far as he is a consumer, and also bears the burden of decreased production which must follow this tax on consumption. The vast majority in the country, then, and especially the owners of downright labor, who constitute the only real wealth-producers, pay this tax to a small minority in the large towns. And yet the essential measures merely preliminary to a return to the money of the world may not even be mentioned by any political party which dreams of success. The people believe the so-called evidence of their senses, and, forgetting that appearances are deceptive, they hug their heavy burdens, being only wise in their own conceit.

These facts and principles must be clearly borne in mind, else the great interest which communities have in all questions of transportation cannot be appreciated. The preliminary discussion may be fairly summed up as follows. All elements of price which add to the amount paid by the consumer of any commodity above the cost of the production and manufacture are in the nature of direct taxes on consumption and of indirect taxes on production, — whether imposed by government, by distance, or the friction of trade, — everywhere and always a tax. The more these taxes are imposed directly, the less onerous and injurious they are ; the more indirectly they are imposed, the more unequal and oppressive they become.

It is computed that the yearly revenue of the forty thousand miles of railroad in the United States is about \$ 350,000,000. This amount, it must be remembered, is a simple tax on travel and production. It is perfectly true, it is a necessary tax, and one gladly paid ; for without it neither travel nor production on the present scale could exist. Undoubtedly, moreover, the speed and convenience of the railroad system lead to an incalculable saving of time and friction, and consequent increase of wealth. At the same time, the railroad system in itself directly produces nothing ; though it carries innumerable tons of merchandise, it never makes one ton two. It simply greatly relieves the friction of commerce, but by no means destroys it. That friction is now represented by a tax, or increased cost, of some three hundred and fifty millions a year, upon travel.

and traffic. Could a new invention be developed which would constitute as great an improvement on railroad locomotion as that is on the system which preceded it, then this annual expenditure of \$350,000,000 would be reduced to about \$35,000,000 upon the same amount moved. In this sense, therefore, the entire cost of transportation is a tax upon the community; it has been much greater,—it may hereafter be much less; greater or less, however, it must always remain a tax.

The next question is, For what purpose is this tax levied, and to whom does it accrue? What portion of this large sum is a necessary tax upon the community? and what portion, if any, is unnecessary? Railroads must not only be built, but they must be operated. The gross income of the system must therefore be devoted to two ends: first, to the operating of the roads; and, secondly, to the remuneration of the capital invested in them. The tables of statistics show, that, under the present system of operating American railroads, which must be presumed to be reasonably economical, seventy per cent of the gross earnings are consumed in operating expenses. This is approximately the absolute cost of working and replacing the machinery which keeps up the movement of commerce. It is the necessary tax, the first cost, as it were, of friction. The remaining thirty per cent of the three hundred and fifty millions of gross revenue—more than a hundred millions of dollars per annum—is the amount reserved as a remuneration for the capital and the risk involved in the construction and management of the system. This sum is, therefore, an annual tax by itself, which the people of this country pay to those who own and control our railroads; and it is a tax deserving of a more attentive consideration than it generally receives. In view of the inestimable value, both immediate and prospective, of the service rendered, and of the essential part it plays in material and moral progress, it would indeed be strange, if this tax were very closely scrutinized, or were not cheerfully, and even eagerly, paid. Yet every tax upon their resources should be calmly and carefully scanned by a people who pretend to guide their own destinies. In spite, however, of its enormous proportions and

onerous nature, in spite of the fact that it adds to the cost of every article of consumption and enters into the expense of every movement of national and individual life, this transportation tax is so indirect in its nature, so plausible and fair in its reason, and so much a portion of the customary life of the community, that it excites absolutely less attention and less real interest and discussion than a tax of a dollar a gallon on whiskey or two cents a pound on cotton.

This annual tax of a hundred millions, or thereabouts, is necessarily levied upon the community by the owners of the railroad system, as being in their estimation a fair compensation, or the best they can get, for the value of the services rendered by them. In other words, certain individuals, responsible to no authority and pertaining to no government, looking solely to the interests of an immediate constituency, yearly levy on the American people a tax, as a remuneration for their own capital and labor, assessed and levied by themselves, equal to one third the expenses of the United States government. In this case it may be that the remuneration is not excessive. Railroad financiers and railroad kings may be unlike other men, and may ask only that which is just and right. If this be so, it is fortunate for the community; for never before was a power so enormous intrusted to irresponsible hands. The obvious danger of committing so extraordinary a power to private individuals could not well have escaped the attention of legislators. But the magnitude of the system then inaugurated was not understood forty years ago, and experience alone could furnish the data upon which a correct system of legislation could be based. The only remedy which then suggested itself was the simple one of affixing a limit to profits. This was accordingly done, and in the earliest charters granted in this country are found clauses reserving a power of abating charges for transportation whenever the dividends of the companies shall exceed a certain percentage on the capital. In England, Parliament further attempted to limit the profits of these enterprises by including in the charters long and carefully prepared lists of charges which the companies could not exceed. Such an attempt, made at that time, could of course only be very crude and



unsatisfactory. It accordingly resulted that the tariffs of charges, being based upon the old turnpike and canal experiences, were extremely exorbitant, and the profits of the early lines were unduly large. In other words, the tax levied on the community by the proprietors of the lines in their own favor was evidently oppressive. This was, however, a direct tax, and, like all excessive direct taxation, it speedily wrought its own cure. The attention of Parliament was called to the subject, and in 1844, at the instance of Mr. Gladstone, a law was enacted which contained a clause of general operation, practically, in the view of railway directors, limiting their dividends to ten per cent per annum upon the stock of their roads. This particular feature of an otherwise well-considered act led to results in no way anticipated. Not only did it go far towards bringing on the railroad mania of 1845, which was comparatively a small matter, but it introduced into England the practice of what has since been known as stock-watering, — one of the most ingenious and oppressive forms of burdening the growth and industry of a people and of mortgaging future development which have ever been devised. Immediately upon the enactment of this law the railway managers resorted to the usual weapons of those who wish to tax an unwilling community. The more direct and lighter tax having raised a popular outcry, they acquiesced in what they regarded as its repeal, and at once proceeded to levy several times the sum previously levied, through a vastly more oppressive form of indirect taxation. As they considered that after the enactment of 1844 they could no longer, on their existing stock, safely divide all the money they could earn, the railroad financiers incontinently proceeded, on every possible pretext, to create additional shares, until the gross amount of the stock should be sufficient to absorb, in the dividends allowed by the act, the utmost possible net earnings of their roads. The Gladstone act, in so far as it failed to place checks upon the creation of new stock, was defective. Excessive charges and large profits had been found to be like excessive direct taxation, — a present burden, which wrought its own cure, and that speedily; but an increase of stock was nothing more nor less than a creation of new national debt. It represented so much paper capital to pay

dividends and interest upon which a tax in the shape of transportation charges was to be levied forever. In other words, the increasing business of the community was mortgaged in perpetuity to pay dividends on capital stock of railways upon which not a penny had ever been paid in.

It is not worth while, however, to go into the details of the history of stock-watering in England. There it has never been reduced to a science, although Sir Morton Peto has lately carried it to a very creditable degree of perfection. In America only is the process found in its highest stage of development. Here it may be studied as an art now in its mature perfection. Commenced long ago, as a simple and desperate expedient for raising money at an enormous discount for the purpose of completing enterprises of doubtful success, we find it referred to in the earlier history of some roads now the most profitable, in passages curiously suggestive. Take, for instance, the roads which have been consolidated into what is now known as the Pittsburg, Fort Wayne, and Chicago. Of one of these we read: "The stock subscriptions which were paid in cash into the treasury of the company were very small,—amounting perhaps, in all, to less than three per cent on the final cost of building and equipping the road. The stock subscriptions were paid for mostly in uncultivated lands, farms, town lots, and labor upon the road." Of the whole road as it stands we are told, that, "of the \$18,663,876, now representing the cost of the road and equipment, &c., the shareholders contributed in cash only about ten per cent, or less than \$2,000,000; and their contributions in cash, bonds, notes, lands, and personal property, labor, &c., to something less than \$4,000,000, or rather more than twenty per cent of the present cost of the work. The difference between this sum and the capital stock, as now shown by the books of the company, is made up of dividends which were *paid in stock*, interest on stock *paid in stock*, premium on stock allowed to stockholders at the time of consolidation, which was *paid in stock*, and a balance of stock still held by the trustees."

This, however, was in the early days of the enterprises, the days of doubtful success, when stock was thought worthless, and often proved so, and was almost given away. But

stock-watering soon took a new form, readily adapting itself to conditions of assured success. It is eight hundred and thirty-seven miles from Albany to Chicago. The roads connecting those two points will furnish a good example of the phase of stock-watering now under consideration. The New York Central was consolidated under a special act of Assembly in 1852. Eleven roads went into the consolidation with an aggregate capital of \$23,235,600. The stock lowest in value of the eleven was settled upon as the par of the new concern, and the stocks of the other ten companies were received at a premium varying from seventeen to fifty-five per cent. By this simple financial arrangement, \$8,894,500 of securities, of which not one cent was ever represented by property, but which in reality constituted so much guarantied stock, was made a charge, principal and interest, against future income. In other words, an indirect tax of over half a million a year was imposed upon the community, which was to receive absolutely nothing in compensation. The next step towards Chicago was one of eighty-eight miles to Erie. This was made up of a consolidation of two roads which went in with \$2,800,000 of capital and came out with \$5,000,000. Upon this ten per cent dividends are regularly paid, imposing another gratuitous tax of \$220,000 forever. The next step in the line was one of ninety-six miles to Cleveland. There has been no consolidation here, simply honest, straight-forward watering, and that with the whole head of the hydrant. This road has cost in money \$4,868,427; it has divided in seven years three hundred and nineteen per cent, and the company pays interest and dividends on bonds and stock to the amount of \$11,250,000,—an indirect gratuitous tax on material development of perhaps half a million a year. The remaining three hundred and ninety miles to Chicago represent as nearly as may be \$3,000,000 more of paper capital, imposing in round numbers a further annual tax of \$200,000. In all, a permanent gratuitous tax for paper capital on one single line of road of over \$1,400,000 per annum.

Almost every conceivable vicissitude of railroad fortune has at some time served its turn as an excuse for stock-watering. Companies have watered their stock because they were rich

and had a surplus, and they have watered it because they were poor and could not make dividends; they have watered it because they did not have stock enough, and recently Erie has been flooded because there was so much of the stock that more made no difference. Stock has been issued because roads have been subjected to opposition, and it is regularly issued because they are exempt from it. The Northwestern turns out an honest president because he objects to an issue of stock, and the New Haven has to submit to heavy watering at the hands of a fraudulent treasurer. Then the familiar practice meets us in its English form as a means of evading a usury law. The State of Massachusetts has always regulated the payment of dividends by practically limiting them to ten per cent on the roads within her limits. Certain railroad companies in the State earned much more than this. These companies, of course, represented the most prosperous, and, for that very reason, the most important lines of travel to the community, — those lines upon which its whole success in the nineteenth-century struggle of competition essentially depended. Of course it was of vital importance to the community to which these roads were the main arteries of prosperity, that the traffic upon them should be taxed as little as possible. The lines, however, have been very profitable, — so much so that dividends of ten per cent per annum by no means depleted the treasury. The community and the legislature watched them with jealous eyes, and it thus became a delicate question how they could best convey their excessive gains from their own pockets to those of the stockholders. Stock-watering, here as in England, furnished a simple and effective means. A consolidation furnished the pretext, an adjournment of the legislature the occasion; instantly \$2,000,000 disappeared out of the treasury and found its way in the form of stock into the pockets of the stockholders, and the business of Massachusetts and Boston was subjected to an additional tax of \$200,000 per annum. The process not only depleted the inconveniently swollen treasury, but, by increasing in perpetuity the gross amount of stock in existence, it went to the root of the evil of excessive earnings, by increasing the number of recipients to whom the legal dividend must in future be paid.

Now and then some delectable financial scheme of the nature of that just described comes to grief, but very rarely, and then as a rule for no good reason. Generally the financier is too much for the legislator. At the last session of the Massachusetts legislature, for instance, a quarrel between the executive and the legislature about the prohibitory liquor law caused the defeat of a very neat little scheme to inflate a ten per cent stock through a consolidation to the extent of five and a half millions. Another year the lobby will probably be more fortunate. But while instances of failure are rare, the records of successful waterings abound. The Reading Road, for instance, was represented in 1843 by \$7,111,292 of capital stock and indebtedness; by 1860 this had increased to \$24,161,889, and it is now \$30,000,000. During these twenty-five years this road has issued 105 per cent of stock dividends on common stock, and 48 per cent in common on preferred stock. Some of the assets set down at cost and included in this thirty million were paid for in cash, and some in bonds at seventy cents on the dollar. Of the stock issues, perhaps thirty per cent were pure water, and the other fifty represented some corresponding, though perhaps nominal, increase of assets. That a road cannot pay regular cash dividends is scarcely to be wondered at, when the divisor is represented by an ever-increasing quantity. The Atlantic and Great Western, again, a notable instance of railroad financiering, represents a nominal cost of \$58,812,853, yet the most competent authority asserts that not more than \$20,000,000 of real money has ever been expended upon it. The Pennsylvania Central since 1862 has not only paid nine per cent per annum in cash, but has watered to the extent of thirty-five per cent more, — thus imposing an annual tax of more than \$400,000. In six years the Chicago, Burlington, and Quincy has watered to the extent of \$5,447,600 upon a stock capital of \$5,738,740, — representing therein over half a million of permanent annual impost on that line of traffic. The Chicago and Alton, having in February, 1866, a stock capital of \$4,208,918, selling at 119 per cent, issued \$2,103,300 of stock, upon which \$632,915 was called in for construction. Upon the remaining million and a half of pure water the traffic of that line has since paid, and will probably continue to pay, ten per

cent per annum. The Cleveland, Painesville, and Ashtabula, with its cost of less than five millions and its construction account of over eleven, has already been noticed in connection with the Albany and Chicago line. The Erie it is useless to refer to. Since 1866, by pure manipulation, the stock capital of this concern has been run up from \$16,500,000, authorized by law, to \$60,500,000, issued by a ring. A corporation, however, which buys Pike's Opera House in Chicago, and "nine houses in Twenty-third Street," and takes out the conveyances of its real estate operations in the names of individual directors, is probably something more than a railway. The operations in Erie have long since degenerated into barefaced, gigantic swindling. But Commodore Vanderbilt's masterpieces have not yet been referred to, though by one turn of his hand three and a half millions of wholly fictitious Hudson River stock were turned upon the market. Rumor has long ascribed to him also a magnificent scheme of deluging Harlem, Hudson River, and New York Central together, — of making by a single turn of the hydrant sixty-eight millions out of their present forty-nine millions of united stock capital, and of exacting in future ten millions of net out of forty millions of gross earnings, instead of a beggarly five millions out of twenty millions as at present. Such a climax of paper capital may yet be in store for us, as the last sinful absurdity of an era of paper money, and the loftiest triumph of railroad financiering. Probably, however, an intelligent people will some day realize that wealth can be created only by hard labor, and that every sleight of hand somewhere conceals a swindle.

If we turn from railways operated by steam to those operated by horse power, the picture does not improve. *Ex pede Herculem*, — take the street railways of New York City. Those best informed assert that the original stockholders of the Second Avenue Road did not pay a cent for their stock. The road cost about \$250,000; its stock now stands at \$618,000, and its bonds at \$350,000. The Third Avenue Road cost \$463,000; its capital is now \$1,250,000, or three times the cost; and within a year each stockholder has received a bond equal to the amount of his stock, making a fictitious capital more than five times the cost. The Sixth

and Eighth Avenue Roads, more moderate, are contented as yet with but a fourfold inflation. When, therefore, these roads, like some steam roads, complain, that, notwithstanding all this, they can make only a moderate dividend of six to ten per cent per annum on their capital, it becomes a pertinent question, whether they mean six to ten per cent on their paper capital, or thirty to fifty per cent on the real cost of their roads.

The science of stock-watering, as thus far described, had not yet, however, attained perfection. The highest stage of development was of course reserved for the last. The stock of corporations had not yet been given away as a sort of gratuity, the right to direct railways and to tax trade was not yet thrown in as a makeweight. In the earlier days of railroad financiering it would naturally have seemed almost impossible to accomplish such a result, but time and experience brought even this about. It originated in the system of railroad mortgages. Very early, and very naturally, in the immature days of the system, attempts were made to construct railways upon an insufficient capital. Funds gave out before the enterprises were half developed, and projectors had their election between abandonment or progress at any price. The obvious resource was to mortgage the property already in existence. Soon the market was weighed down with every conceivable description of railroad security. First there was a floating debt; then preference stock, to be followed in rapid succession by first, second, and third mortgages; construction and equipment bonds closing up the dreary procession, which not seldom ended at the tomb of a receivership. All these evidences of indebtedness were, however, secured on property really in existence. The art was not at first discovered of mortgaging something thereafter to be created. Presently new roads were projected, the business of railroad construction and financiering being now reduced to a system. The country through which these roads were to pass was young and poor, and capital had to be brought in from outside. There was abundance of it, and that, too, in the hands of men who understood their business, and who drove hard bargains, and those men must be induced to think well of the enterprise. The

whole thing is in the hands of a ring, — a combination of politicians, projectors, and capitalists. In the first place, a new road is demanded, and, as an enterprise, promises well. The next thing is to raise the money necessary to construct it. This is done, not by laying an assessment upon the stock, — that is not heard of as yet, and has no value in the market, — it exists only in name. In place of this, the bonds are put upon the market at a stated price, which, or a portion of which, is advanced by the capitalist, and construction is carried on with the proceeds. The stock itself then passes as a gratuity into the hands of those advancing money upon the bonds. The result is, that by this ingenious expedient the ring hold a mortgage, paying them a secured and liberal interest, on their own property, which has been conveyed to them forever for nothing. The stock is at once nothing and everything. Given away, the donees own and manage the road, and, receiving a fixed and assured interest upon their bonds, enjoy a further right to exact an additional sum, and one as large as they are able to make it, from the developing business of the country, as dividends on the stock. Instances of this form of railroad financiering need not be specified, for it is now the common course of Western railroad construction. The new country needs its railroads, and is willing to pay anything for them. The capitalists of the old country specify their own terms of construction, which, in plain language, read simply, — A large interest assured, and as much more as the business of the country can be made to pay.

Even this process, however, has been improved upon. Not seldom the credit of the embryotic enterprise is bolstered up extraneously. Simple mortgages are not sufficient, and the credit of the road is guarantied by land-grants, or by national or state or town or county loans, or by the credit of connecting or established lines, or by any or all of these combined. Every expedient which the mind of man can devise has been brought into play to secure to the capitalist the largest possible profit, with the least possible risk. The Pacific Railroad furnishes the best example of all these various expedients.

The Pacific Railroad is already a power in the land, and is destined to be a power vastly greater than it now is. The



present is with it the day of small things, yet it already numbers its retainers in both houses of Congress, and is building up great communities in the heart of the continent. It will one day be the richest and most powerful corporation in the world ; it will probably also be the most corrupt. What the Erie and the New York Central have been to the politics of a single State, that, and more, this road may yet be to those of the whole country. Yet in speaking of it, it is not pleasant to adopt a tone of criticism towards the able and daring men who are with such splendid energy forcing it through to completion. It is a work of great national import and of untold material value. Those who took its construction in hand incurred great risk, and at one time trembled on the verge of ruin. This enterprise was to them a lottery, in which they might well draw a blank, but, should they draw a prize, the greatness of the prize must justify the risk incurred. The community asked them to assume the risk, and was willing to reward their success. Success was well worth all it might cost, and the cost should and will be paid uncomplainingly. At the same time it cannot be improper to consider what the process of construction is, and it may not be amiss to argue as to the future of the enterprise from its present ; for here, as elsewhere, the child will prove father to the man.

As every one must now know, the length of the united road is computed at 1,637 miles, and the cost of construction was estimated at \$60,000,000. To meet this outlay a stock capital was authorized of \$100,000,000 for each of the two great divisions of the line ; upon this, however, no dependence was placed as a means of raising money ; it was only a debt to be imposed, if possible, on the future business of the country, and it will be well if it does not prove about as real a debt as the bonds of the United States. A curious mystery, indeed, hangs over this part of the financial arrangements of the concern. No one seems to know anything of the stock, and no one seems to be responsible for it. Much is heard of the subsidies, the land-grants, the bonds, and the earnings of the enterprise ; but of the stock, where it is, and how it got there, the most diligent are uninformed. Probably not \$20,000,000 ever has been, or ever will be, derived

from this source. The rest is, or pretends to be, as clear as day: there is the government subsidy of \$30,000 a mile, and \$30,000 a mile of mortgage indebtedness; there is a land-grant of 12,800 acres a mile, and, where there are States, there are bonds, with interest guarantied by the State, and real estate donations from cities, where cities exist; and there are even millions of net earning applied to construction. The means to build the road are not grudgingly bestowed. Meanwhile, as to difficulties of construction, we are told "that the line of the road up the eastern slope of the Rocky Mountains is not so difficult as those upon which several great works have been constructed in the Eastern States"; that "elevated tablelands present great facilities for the construction of the road"; and, finally, "that the whole line of the proposed work is a very favorable one," and "more than one half of it is practically level." Of the western division we are told that it has surmounted the Sierra Nevada by a "favorable line, involving no grade more excessive than such as have been worked for years by the Baltimore and Ohio"; that "the remarkable uniformity of the surface offers great facilities for the construction of the proposed road"; and, finally, that this line also, "notwithstanding the great elevation of a considerable portion of it, will compare favorably with Eastern roads." It is, moreover, matter of common notoriety, that, for great distances, this road is sufficiently a surface road to allow miles of track to be laid in a single day. And yet, while the first cost of no other road in the country has exceeded \$80,000 a mile, and the average has been but \$41,000 in localities where such speed of construction was physically impossible, and where heavy land damages added to cost, the contract price paid on the eastern division of this road has been \$68,058 per mile, while the mountain section of the California end has exceeded \$100,000. The first-named sum, too, was paid on the Union Pacific for a road which could be laid down at the rate of seven miles, sometimes, in a single day, and some five hundred in a year, while the road-bed was a free gift from the country, and ran, unfenced, over a prairie. This matter is deserving of attention. Letting it pass, however, indulging in no criticism, and conceding that this money is properly and

necessarily expended, it still appears that a debt in stock and bonds of some \$320,000,000 is likely to be incurred for a work which will have really cost at its contract prices not \$140,000,000. But what does the work cost the contractors? This, probably, will always be a mystery. Of the western division, or Central Pacific, absolutely nothing is publicly known. Managed by a small clique in California, its internal arrangements are involved in about the same obscurity as are the rites of Freemasonry. The eastern division, or Pacific Union, however, is built by contract nearer home, and here rumor at least has been busy, and declares that a new piece of machinery, called the Credit Mobilier, has come into play. The Credit Mobilier is understood to be building the road; but what this Credit Mobilier is seems to be as much shrouded in mystery as is the fate of the missing \$180,000,000 of capital stock of these roads. The paternity of this institution is currently supposed to lie between General Duff Green and the irrepressible George Francis Train; or rather, to speak more exactly, some intelligent broker is supposed to have stolen from Green the charter under which the association was organized, and Train applied the stolen property to the purposes of Pacific Railroad construction. The question of proprietorship, at least, is now understood to be in litigation. Whoever originated this anomalous corporation, it is currently reported to be the real constructor of the Union Pacific, and now to have got into its hands all the unissued stock, the proceeds of the bonds sold, the government bonds, and the earnings of the road,—in fact, all its available assets. Its profits are reported to have been enormous,—reported only, for throughout all this there is nothing but hearsay and street rumor to rely upon. Sometimes it has been stated that the dividends of this association have amounted to forty per cent a month, and they have certainly exceeded one hundred per cent per annum; at any rate, it has made the fortunes of many, and perhaps of most of those connected with it. Nor are these profits temporary; every dollar of excessive dividend of the Credit Mobilier is represented by a dollar of indebtedness of the Pacific Railroad, with both principal and interest charged to income, and made payable by a tax on trade. Who, then,

constitute the *Credit Mobilier*? It is but another name for the Pacific Railroad ring. The members of it are in Congress; they are trustees for the bond-holders, they are directors, they are stockholders, they are contractors; in Washington they vote the subsidies, in New York they receive them, upon the Plains they expend them, and in the *Credit Mobilier* they divide them. Ever-shifting characters, they are ever ubiquitous, — now engineering a bill, and now a bridge, — they receive money into one hand as a corporation, and pay it into the other as a contractor. Humanly speaking, the whole thing seems to be a species of thimble-rig, with this difference from the ordinary arrangement, that, whereas commonly “the little joker” is never found under the thimble which may be turned up, in this case he is sure to be found, turn up which thimble one may. Under one name or another a ring of some seventy persons is struck, at whatever point the Union Pacific is approached. As stockholders they own the road, as mortgagees they have a lien upon it, as directors they contract for its construction, and as members of the *Credit Mobilier* they build it. Again, what is the community to pay for it? That they will pay many-fold what the work need to have cost many have long suspected; that, however much they may pay, they will pay more than it is materially worth, few will assert. Here, however, is every vicious element of railroad construction and management; here is costly construction, entailing future taxation on trade; here are tens of millions of fictitious capital; here is a road built on the sale of its bonds, and with the aid of subsidies; here is every element of cost recklessly exaggerated, and the whole at some future day is to make itself felt as a burden on the trade which it is to create, and will surely hereafter constitute a source of corruption in the politics of the land, and a resistless power in its legislature.

Enough has been said to illustrate the bearing which stock-watering and extravagant construction have upon taxation. It would be useless to attempt to estimate the weight of the burden imposed through these means upon material development. The statistics which should enter into any reliable estimate are not accessible, and any approximation would be simply a matter of guess-work. A few hints upon this point are

all that exist. A circular of Henry Clews & Co., under date of June 15, 1868, specifies twenty-one leading railroads quoted on the New York Stock Exchange, the stock capitals of which have been increased from \$157,371,484, in 1862, to \$265,828,149, in 1867, or sixty-nine per cent in five years. "The Commercial and Financial Chronicle," the best authority which the country affords on such a subject, in its issue of August 22, 1868, estimated the addition to the share capital of the principal roads upon the New York Stock Exchange as "fully \$45,000,000 within the last fifteen months." This amount probably represents three millions of additional dividends per annum. As the whole amount of the freight transportation of the entire country during the last year was \$140,000,000, this amount represents two per cent additional on the whole cost. Meanwhile, taking New York as a centre, and allowing the cost of transportation to be one and one half cents per ton per mile, the addition or reduction of one eighth of a cent per mile for heavy articles limits or extends by twenty-five miles the radius of territory from which trade can be drawn. The present circle is upon a radius of 1,200 miles. At a low computation, therefore, this additional tax of \$3,000,000 per annum, now devoted to dividends as the result of but fifteen months of stock inflation, would, if applied to the reduction of freight on raw materials, have extended the area from which trade could be drawn over at least 20,000 additional square miles of territory. The mischief in so far, however, is done; the forty-five millions have been issued within the fifteen months, and now possess all that sanctity which attaches to vested interests and the rights of property. It only remains for the community to ponder well how many hundreds of millions of stock are yet to be created in this way, and how many additional millions of annual tax are yet to be levied upon them. For the time being, the marvellous growth which naturally marks the development of a new era, like this of steam, in a young country, makes any burden seem easy to be borne. Progress at any price is the watchword of the present. Yet, if the principles upon which that progress is based are not sound, if they are characterized by waste, by fraud, and by improvidence, then the progress which is founded upon them cannot

be healthy. The day of reckoning seems now impending over England. It may yet come for us.

Stock-watering, unfortunately, is but one form of railroad inflation ; another form of the same thing, and one even more costly than this to the community, arises from injudicious competition. It was many years after the railroad system was inaugurated, before any, except the most clear-sighted, could be made to realize that railroads were a monopoly, and must be treated as such, not only in their own interest, but in that of the community. M. Rogier, the Belgian Minister of Finance under King Leopold, saw it as early as 1834, and upon that principle founded the famous system of Belgium. George Stephenson, the sagacious father of locomotion by steam, saw the thing in its true light from the beginning, and condensed the whole question into the pithy apophthegm, that, "where combination was possible, competition was impossible." Again in 1846, before a committee of the House of Commons, he gave it as his decided opinion that the power of government supervision should extend to vetoing the construction of competing lines, to protect the public against the heavy rates of traffic which would be required to remunerate the capital involved in their construction. Stephenson fully appreciated what the ultimate burden of free trade in railway construction would amount to. He saw that a line once built must impose a tax on the community, if only to keep itself in existence. He also saw, that, if a competing road was built to divide any given business which could by any possibility be done over a road already constructed, in the end that business must support two roads instead of one. A very slender knowledge of human nature would have enabled him to take the next step, and conclude that any number of competing roads would ultimately unite to exact money from the community, rather than continue a ruinous competition. As combination must always remain possible, no matter how many roads are constructed, it necessarily follows, that, the more roads, the heavier tax, provided always that a less number properly managed could have been made to do the work. Relief did not lie in that direction ; it could be found there only under circumstances which rendered exclusive

combination impossible. Nor is human legislation to be included in the number of such circumstances. Had Stephenson lived a few years longer, he would have seen in England an excellent example of the virtues of railroad competition guaranteed by law, as a safeguard to the community,—an example not without a savor of comfort for us, with the memory of recent legislative experiences fresh in mind. The Great Northern Railway went before Parliament for its charter. The lines threatened with competition combined their influence, and the bill was thrown out. The next year the application was renewed, and those having the bill in charge engineered it successfully through Parliament by offering to accede to a charter limitation of first-class fares to a point thirty per cent below those charged by the existing companies. The bill was passed and the line constructed, so that a combination, except at low fares, seemed prohibited by act of Parliament. Before the new road was opened, however, before a passenger had passed over it, its directors, pointing out to the other companies how much they would suffer from such ruinous competition, induced them to combine the Parliamentary strength of all concerned, and they actually engineered through Parliament an amendatory bill, raising the fares of the new road to the level of the old. The law of self-preservation had simply been repealed by act of Parliament.

How much this fallacy of cheap transportation through railroad competition has cost Great Britain cannot well be estimated. During the mania of 1845–46, it was estimated by Mr. Laing, of the Board of Trade, and the estimate was confirmed by Robert Stephenson, that out of three hundred millions sterling, at that time expended, seventy millions had been completely thrown away in constructing unnecessary duplicate lines with a view to competition. No similar estimate by a competent authority has ever been made for America, but glaring examples of the costly blunder need not be sought far. An admirable instance is furnished in the history of Massachusetts. The introduction of the railroad system revolutionized America more, perhaps, than any other part of the world. The great resources of the country were opened up with surprising rapidity, and new channels of trade con-

tinually revealed themselves. The law of gravitation also made itself felt, attracting commerce more and more to certain great centres, and ever threatening to leave local centres bereft of their importance. Boston was one of these local centres; and Massachusetts, also, as a community, took pride in her individuality. The great force of the natural law seemed at once to threaten destruction both to material prosperity and to individual character. To preserve to Boston her commerce and importance as a centre thus became a great feature of Massachusetts policy. It was essential that the city should remain a channel of trade between the interior of the country and the world beyond the Atlantic. To attain this result in competition with New York it was absolutely necessary to reduce the time and expense of transportation, both of persons and of merchandise, to the lowest possible point.

If the work were all to be done over again, it would not now be difficult to devise and to estimate the cost of the thoroughfares which the interest of this community most demanded. Regarding the outlay as an expenditure of private wealth to be remunerated by a tax upon transportation, the aim should be to expend the money under such conditions, natural and financial, as would accomplish the greatest possible amount of business at the least possible tax. Two channels of communication were evidently required: one communicating directly with the West by rail by way of Albany, and running over much the same line as that traversed by the Boston and Albany Road; the other communicating directly with the Lakes, and connecting as closely as possible the great internal waters of the continent with Boston harbor. Such a thoroughfare would naturally have passed from Boston by way of Fitchburg, Rutland, and Crown Point, through the Adirondack iron regions, directly to Ogdensburg. The cost of two such lines can easily be estimated. From Boston to Albany is 200 miles, and from Boston to Ogdensburg by the way indicated would be about 350 by rail; the cost of the roads, thoroughly equipped, should not have exceeded \$65,000 a mile, or \$35,000,000 in all. The annual tax to remunerate this amount of capital, which must have been levied upon trade over the lines, need not have exceeded \$3,000,000.



Turn now from what should have been done to the consideration of what has been done, and what is now being done. The men of thirty years ago evinced great sagacity in the way in which they began their work. They had no experience of the system they were called upon to inaugurate, but, as far as they went, they made few mistakes, and, had the next generation acquitted itself as well, the results of to-day would have been very different from what they are. The first effort was to connect Massachusetts and Boston with the interior of the continent, and to that end the present Boston and Albany Road was chartered in 1831 and 1833. The through line was opened in 1842, and the construction account of the two roads constituting it was then represented by the not unreasonable amount of \$5,700,000 of stock, and \$5,319,520 of indebtedness. At this time the vicious principle was established of limiting the dividends on capital stock to seven per cent per annum on the Western, and ten per cent on the Boston and Worcester Road, thus attempting to protect the interests of the community, under the impression that all surplus earnings would naturally be devoted to the development of the enterprise, or to the reduction of fares and freights. Instead of establishing tariffs of maximum charges, subject to stated periodical revision, and leaving the corporation free to divide all they could earn while working within legal limits, it was supposed that corporations would be willing to do all the business that possibly could be done, without regard to the fact that the dividends received depended only in a very limited degree upon the amount of work done. It was many years before the fruits of this policy matured. At last they came, and were bitter. All over the country railroads multiplied and extended. Elsewhere rivers were bridged, elevators were built, double tracks were laid down, agencies were established, connections were formed, and improvements in rolling stock eagerly adopted. Yet in Massachusetts, though the seven and ten per cent dividends were regularly paid, though large surplus funds accumulated, and every pretence for the evasion of the foolish usury law was eagerly watched for, at the end of thirty years of successful operation, with the capital stock of the roads quoted at a premium of forty per cent, such a river as the Hudson at Albany

was unbridged, not an elevator existed upon the soil of Massachusetts, but a single track connected Boston with Albany and the West, no agencies of the roads existed, or, if they did exist, they were notoriously inefficient, a through business which on connecting roads had in a few years increased five hundred per cent had not upon this road increased sixty per cent, and the rolling stock of New England was notoriously behind that of Wisconsin or Illinois. The simple truth was, that, while these roads could and did earn all and more than all that they could safely divide by doing the business which came naturally to their hands, they did not care to increase that business, and by so doing, as they feared, brave the danger of hostile legislation. And yet, while the roads were stationary, their capital accounts were by no means so, for the eleven millions of stock and indebtedness of the two roads in 1842 went into a consolidation in 1867 twenty-one millions, and came out of it twenty-four.

Long before this, however, the whole community, disgusted with manifest results, and too impatient for a correct investigation of causes, went wholly astray in chase of the *ignis fatuus* of protection through fictitious competition. They saw only that a monopoly existed; they failed wholly to realize that it was far easier and far cheaper to regulate than to destroy it. While Baltimore and Philadelphia, following out more correct principles, brought the whole sum of their resources to bear upon the immediate development of the single lines connecting them with the interior, increasing their capacity many-fold and making them veritable rivers of commerce, Massachusetts practically abandoned the development of the roads already constructed, and turned her whole hopes and built for her whole future upon the construction of opposing lines. Thus, while the one line which already connected her with the West, and which might easily have been made to vie with the Pennsylvania Central or the Baltimore and Ohio, was not yet developed to a fifth part of its capacity, three new lines were originated and floundered miserably along to partial completion or immature development.

First, a line was to be constructed to Ogdensburg and the waters of Lake Erie. The wretched history of this combina-

tion of roads has already been sketched in the pages of this Review.\* The point of destination was indeed reached, but the history of the enterprise must be sought in the records of the Courts of Chancery of New York, Vermont, and New Hampshire. The several roads which compose this first abortive effort at competition — after repeated bankruptcies have indiscriminately swept away numerous issues of every description of railroad security — are now represented by a capital in stock and bonds which may be stated in round numbers at \$35,000,000. This line, however, consisting of connecting local roads, was hardly designed for a thoroughfare, and, subserving one original purpose, may be left out of the account of Boston mismanagement. It is merely one more possibility lost. Yet this is, to this day, the only one of the three lines which it was thought would relieve Boston of its dependence for through traffic upon the Albany Road, that has reached its destination at all. It has cost the community, first and last, at least double what the best possible line to the same point need to have cost. It adds comparatively nothing, as yet, to the coveted business connection of the extreme East with the West. It has not yet begun to be developed to the extent of its capacity, or thought of consolidation, which must be the first movement towards it. So much for one effort at protection by competition.

Next in point of time came another notable project, which was to accomplish all that was most desired. A line was to run from Boston to the West in connection with the Erie Road, as did the Western in connection with the New York Central. Then the Boston, Hartford, and Erie rose into existence, and floundered along over ruined hopes and shattered fortunes on a paper capital, promising everything and accomplishing nothing. This enterprise, when it shall be completed in the not very immediate future, perhaps will then have cost some fifteen millions of real money, which will be represented by twenty-five millions of stock of very doubtful value, and by twenty millions of mortgage indebtedness. In other words, one third of its cost upon paper will be represented by real property.

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\* North American Review, April, 1868, pp. 570 - 572.

The mistaken notion that competition would remedy the evils of railroad monopoly did not, however, stop here. It led Massachusetts into another and the crowning folly. Instead of developing the road which had been built with the public money, — the charter of which expressly reserved to the legislature all necessary powers in the premises, — instead of insisting on the simple rights of the public, the State itself was gradually drawn on to sink millions in an attempted competition with its own road from end to end. The new line projected was to be no improvement upon the old one already constructed. It ran between precisely the same termini, and was no shorter, while its curves were much sharper. It opened no new connections; it developed no new traffic; it did not run through a rich country; and it did run into a mountain. While France and Italy combined hesitated long about a tunnel which was indispensable to the existence of a single thoroughfare across the Alps, the little commonwealth of Massachusetts, with one thoroughfare to the West, created by herself, already in existence, and two more far advanced towards completion, blunders headlong into the task of piercing the Green Mountains with a tunnel second only, in all the world, to that of Mt. Cenis.

Communities, like individuals, must buy their own experience, and the Hoosac tunnel will form no small item in the account of Massachusetts; but such is the final absurdity into which a total misconception of the principles of economical transportation has forced an intelligent people. The Hoosac tunnel and the connecting links of the northern line to Albany will probably cost the people of Massachusetts some \$20,000,000 of real money, represented by their own bonds. The result is a simple sum in addition and subtraction. The best possible lines to Albany and to Ogdensburg should not have cost more than \$35,000,000, if paid for in real money, — a fair remuneration upon which would have been some \$3,000,000 per annum. The lines which have been wholly or partially constructed, leaving the question of their thorough development untouched, must involve an actual outlay of more than \$80,000,000, which will be represented by over one hundred and twenty millions of stock and bonded indebtedness, upon which some six millions in divi-

dends and interest will annually be paid.\* Happily, a portion of the amount never has received and never will receive either dividends or interest, and bankruptcy will unquestionably relieve the East of a portion of this burden. From twenty-five to forty millions of paper trash will undoubtedly cease to exist, leaving about ninety millions charged to the account. Neither the New York Central, the Pennsylvania, nor the Baltimore and Ohio represents a construction and equipment cost exceeding \$36,000,000. The conclusion seems startling, and yet it cannot well be avoided, that, allowing \$35,000,000 for the construction of through, and \$15,000,000 for subsidiary lines, the lack of an intelligent system and an ill-considered faith in manufactured competition have saddled the trade of the East with a wholly unnecessary debt, which it cannot shake off, larger than the entire sum expended in the construction and equipment of any one of those thoroughly developed trunk lines.

This is not all, however. The last evil of competition in railroads is yet in store. Roads must not only be constructed, they must be operated. The remuneration of capital in this case will bear but a small proportion to the expense of operating. The whole represents the total cost of transportation. In Massachusetts the net earnings are thirty per cent of the gross. Under the system of competition, four roads, with all their costly machinery and corps of officials, must be sustained by Boston, while one each satisfies Baltimore and Philadelphia; and the four, it will be found, will never do that work for which under another system two would have been ample. So far as through business is concerned, much less than half of the money judiciously applied might have been made to do the work much more than twice as well. This result, at least, is fully demonstrated by the experience of other communities.

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	Real Cost.	Stock.	Debt.	Securities representing value.
* Boston and Albany,	Estimated. {	\$17,500,000	\$18,000,000	\$ 5,800,000
Boston, Hartford, and Erie,		15,000,000	25,000,000	20,000,000
Troy and Greenfield,		17,500,000	17,500,000	17,500,000
Boston to Ogdensburg,		30,000,000	21,000,000	10,000,000
		\$ 80,000,000	\$ 64,000,000	\$ 53,300,000
				\$ 86,300,000

How could these difficulties have been avoided? How can they be remedied? It is very easy to find fault with the past; but little service is rendered, unless a remedy is pointed out for the future. At the first glance it seems as though these difficulties arose from a natural and irrepressible antagonism between the interests of the community and those of the corporation. It is of course the interest of the community to obtain from its railroads the greatest amount of service at the least possible remuneration. It is no less clearly the interest of the corporation to exact from the community the largest possible returns for the service rendered and the capital involved. How can these conflicting interests be made to accord? To limit dividends by law only aggravates the evil, in the experience both of England and America. If the limitation cannot be evaded by a disastrous course of stock-watering, then the whole incentive which desire of gain lends to the spirit of the enterprise is lost upon the corporation. It is one alternative or the other, but the dilemma cannot be avoided. To limit profits, and not to limit issues of stock, leads only to stock inflation; to limit profits, and at the same time to prohibit the issue of stock, puts a stop to development. Whether corporations have souls or not, they are very subject to those fears and hopes which influence the action of individuals. They will expand and develop prodigiously, if they see their interest in so doing. They fear hostile legislation, and will either seek to avert it or will avoid that which threatens to bring it upon them; they will not labor any more than the average of mortality from an abstract love of the general good. If the law limits their utmost earnings to a given amount, and they cannot evade the law, they will do no more labor than is necessary to earn that amount. If the law can be evaded by the issue of stock dividends, then they will labor to divide stock; if the law also prohibits stock dividends, and can be evaded in no other way, then the development of business will probably stop at the point where the legal dividend is earned. Railroad corporations are simply human, and the influences of gain and of self-preservation affect them as they affect all men. When legislators realize this, those laws will disappear from the statute-book which seek to compel them to do a full day's work for half a day's wages.

So apparent has the conflict of interests which results from crude or mistaken legislation become, that many have concluded that the difficulty admits of but one solution. They advocate the purchase of the roads by the community, and the extinction of the principle of corporate life, with a view to operating them, mediately or immediately, by the government for the public. Such a system has already long been developed in Belgium, and, to a limited degree, in France. There appears to be one objection to it in America, and that one, unfortunately, if valid at all, is conclusive: it would seem to be impracticable. Every people has its own individual character, and a government adapted to it. Spain loves the maternal government, after the fashion of a spoiled child; France loves the paternal government of the iron hand; England loves self-government and the development of the individual; and America has inherited this characteristic of England. Government supervision among Anglo-Saxons is apt to degenerate into jobbery. In America, particularly, the whole instinct of the people leads them to circumscribe rather than to enlarge the province of government. This policy is founded in wisdom. Government by the people is apt at all times to degenerate into government by the politicians and the caucus; and the people, if wise, will keep the province of the government within reasonable limits. The spoils of victory are large enough already; and few thoughtful men can doubt as to what would be the result, if political victory carried with it a power and patronage such as hitherto have not been dreamed of even in the imaginings of the most corrupt of the Tammany ring. The Tammany ring is bad, very bad, in its kind; the Erie ring is bad, and very bad, in its kind: as yet, however, they are not the same. Imagine the Erie and Tammany rings rolled into one and turned loose on the field of politics, and the result of State ownership of railroads will be realized. This plan, therefore, may apparently be dismissed from consideration. It might operate well elsewhere: it is doubtful if it will ever do for America, until America ceases to be free.

There is but one other way of attaining the desired result, — a way never yet tried in America, though common enough in Europe. It may best be described as a contract system, based

upon the principle of corporate life. Under this system, at stated intervals of time, the community, through its representatives, and the corporations controlling its railway lines meet as equal contracting parties. The community grants or confirms to the corporation an exclusive right of transportation between two given points, during a stated period of time. The existence of a monopoly within certain defined limits is recognized and guarantied. In return for this valuable franchise, the corporation must bind itself fairly and satisfactorily to accommodate every demand of travel or traffic between the limits and during the time specified, in accordance with a certain tariff of fares and freights, which is made a portion of the charter. The only remaining principle follows as a corollary of the others: it is, that the corporations, while acting under the conditions of their charters, shall be at liberty to divide all the profits they can possibly earn, without any limitation by law, and free from all fear of hostile legislation. The amount of capital stock must be limited, fares and freights must be fixed, and dividends must be free. These principles are inseparable.

A policy such as that described is based upon various correct principles. In the first place, things are recognized as being what they really are. Railroads are recognized as monopolies, and regulated as such. Again, all railroads are not alike. They are constructed for different kinds of business, with different machinery and at varying cost. One road is for local and slow travel, and another is for through and rapid travel; one is a passenger line, and another a freight line; the business of one is steady and unvarying, that of another fluctuates with every season and every month; the cost of construction and operation are never the same. All these elements of economy need to be regarded, and could be, under the system suggested. At present, in America no distinctions are recognized, but in the view of the law railways are everywhere and always the same thing, enjoying one with another the same privileges and subject to the same restrictions. Finally, under the system of special contracts, the laws limiting dividends would be done away with, and what the railways earned, that they would be free to enjoy. The principle would be recognized that profit is



a great incentive to energy, and where charges cannot be exceeded, increased profits can flow only from increased development. The profits of the roads being thus all divisible and being earned on a fixed tariff, it at once becomes their controlling interest to encourage in the community the greatest possible volume of business, to keep the capital stock at the lowest possible amount, and to declare the largest possible dividends.

It only remains to consider how such a system — a system manifestly in the interest of all parties concerned — may be matured and brought into effective operation. It can be done but in one way. The community must be competently represented, as well as the corporation. Hitherto the railroad managers have had it all their own way. They have corrupted legislatures, made laws, evaded contracts, cheated the people, and, not unfrequently, themselves also. Their policy has ever been seemingly grounded on the idea that their interests and those of the community were naturally at variance. They always have opposed, and they do now oppose, and with general success, too, every effort to reduce their system to some intelligible principles. The questions are simple ones of statistics and experience, — not difficult of solution, if approached in a spirit of patient study. Yet the very mention of competence and intelligence, applied to the study of their relations to the public, seems to fill the corporations with vague visions of terror. Nor is this feeling confined to the rings. They of course are opposed to any system which might serve to guard a cheated community against their adroit manipulations, or, at least, to expose them. Chaos like the present is their element, and legislatures are their most favorable fields of action. The power of the rings alone — a power which within a year has paid a bribe of \$150,000 to a single member of the New York Assembly — is probably sufficient to defeat any effort at reform. But they are not alone in their efforts. With them in the struggle against light upon this subject are combined those whom they rob, — the honest *bona fide* holders of railroad property. All parties to this strange combination unite in an unceasing prayer to be let alone, — to be allowed in their own way to increase the debt and taxation of the community to suit themselves. Yet how is their desire gratified? How

are they let alone? Year after year they are dragged into the halls of legislatures and the rooms of committees, and made to fight ever-recurring battles, — the conflicts of one year only leading to those of another, until in pure self-defence they reduce corruption to a science, and buy the peace which is not given them. What is the result? Correct information is almost never imparted, and there is no one with authority to exact it; the public is defrauded, and there is no one to protect it; corruption constantly increases, and there is no one to expose it. Figures, in the skilful hands of railroad officials, seem made, like language in the mouth of a diplomat, not to express truth, but to conceal it. One who has puzzled over these problems long and patiently writes, in language not too strong: "The reports of the companies are not always to be had, and, even when obtainable, are so ingeniously devised to deceive, that only severe labor enables one to discover where the legerdemain is accomplished. The system is bad enough, but its administration is a perfect pest-house of corruption; the dishonesty is almost incredible, and is practised without need or profit, frequently from mere habit."

There is but one way out of this trouble. The one thing needful to its settlement is knowledge. Soon or late the community has got to meet and understand this matter. Before that time comes, the corporations may have succeeded in piling up yet other millions of unnecessary capital, and levying other millions of annual tax to pay the interest upon it; but when the day comes, the community will procure its knowledge in one way, and one way only. Robert Stephenson, years ago in England, saw things with a clearer eye than is vouchsafed as yet to our directors of railroads. He, of all men the one best representing the railway interest, in the full light of his great experience, saw that it was ignorance in the law-makers, and not knowledge, that the corporations had most to fear. Ignorant legislation was then in England, as it now is here, at the root of the railway question. In the year 1856 Stephenson was elected President of the Civil Engineers. In his inaugural address he said: "What we ask is knowledge. Give us, we say, a tribunal competent to form a sound opinion. Commit to that tribunal, with any restrictions you think necessary, the whole of the questions appertaining to our system.

Let it protect private interests apart from railways; . . . . delegate to it the power of enforcing such regulations and restrictions as may be thought needful to secure the rights of private persons or of the public; devolve on it the duty of consolidating the railway laws, and of making such amendments therein as the public interests and the property now depending on the system may require; give it full delegatory power over us in any way you please. All we ask is, that it shall be a tribunal which is impartial, and that is thoroughly informed; and if impartiality and intelligence are secured, we do not fear the result."

This is even more applicable to America now than it was to England then. It was aimed at Parliamentary meddling. But in England there is at least but one Parliament, in which are always to be found in the committee-rooms many men of extensive information and great experience. There is always a tradition, at least, of what has been arrived at through the labor of other years. In America even this does not exist. In this statute-ridden country two score of State legislatures each bungle their own work in their own way, while Congress sets an example of confusion to all. Knowledge cannot possibly creep into the legislature, because no one remains in the legislature long enough to learn. Committees shift with every year, and are constructed with an eye to current events; meanwhile the lobby is permanent, and the corporation is ever alert to defeat any scheme which may throw light on its operations. Knowledge, then, being the great desideratum in this matter, and the legislatures having wholly failed either to give evidence of possessing it themselves or of being able to impart it to others, it only remains for the community to provide other machinery through which the information so necessary may be procured. Bureaus, or boards of commissioners, having charge of questions in relation to railways, should be established, both State and national. Already some steps have been taken in this direction. At the last session of Congress, the question of the right of that body to legislate concerning railroads passing from one State into another was referred to a committee, and was favorably reported upon. The conclusion of the report in question contained the strongest possible argument as to the necessity of the creation of a bureau or commis-

sion to deal with this subject. The committee had been instructed to prepare an elaborate bill regulating the relations of the railroads and the public. They reported in favor of such a bill, and then wisely confessed their own utter inability to frame it. The statistics, the comparison of systems, the practical experience, and the opinions of experts, were all declared wanting. They recommended a full and careful investigation of the whole subject, and then went home to look after their own re-election. The most important material interests of the American people are deserving of better care than an honest confession of ignorance. A special commissioner instructs us better as to our revenue, even though Congress rarely follows his advice; and Congress could do nothing better or wiser, during its present session, than to establish a bureau of the Department of the Interior, under the charge of a commissioner, who should devote his attention solely to questions of transportation. There at last some reliable statistics could be collected, and these problems could be studied out and reduced to well-considered legislation. Thence Congress and the country might be educated. We might then hope to know how large a tax is annually levied on business under the head of transportation, and how large a portion of it is applied to the payment of dividends and interest on paper capital; we might then hope to know how much our railroad system has cost, and by what securities that cost is represented; it might then some day become difficult to deluge the market with forged certificates of stock, and call the so doing a "financial irregularity"; it might even become questionable whether a railroad potentate had the right to double the nominal cost of a public thoroughfare without adding one dollar to its value; there might then be some agency whose absolute duty it should be to stand between the community and the perpetration of frauds innumerable; and, finally, the time might then come when the community and its corporations would labor in unison and with harmonized interests, when the heaviest tax the public might be called upon to pay would be levied in the least onerous manner, and when stock-watering and railroad financing would be remembered as curious traditions of an imperfect past.

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